

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 3, line 1 with the following paragraph:

In an advantageous development of the invention, the photoresist layer comprises the epoxy resin known as SU-8® (MicroChem Corp.), bisbenzocyclobutene (Cyclotene®, DOW) or CYTOP® (Cyclic Transparent Optical Polymer, Asahi Glass Company).

Please replace the paragraph at page 3, line 27 with the following paragraph:

The material known as SU-8® as the photoresist layer and PDMS as the microchannel material layer have turned out to be a particularly advantageous material combination.

Please replace the paragraph at page 3, line 30 with the following paragraph:

The invention especially refers to reconfigurable (i.e. switchable) electrode arrangements on multilayer PCB's (Printed Circuit Boards) provided with one or a plurality of thin polymer layers (e.g. photoresist SU-8®) adapted to be structured through lithographic processes and serving as a substrate for microfluidic systems. The polymer layers act as biocompatible, planarizing and otherwise physical protective and/or level, and they may additionally serve as a structurable material for forming microchannels in the microfluidic system and as a soldermask for equipping the circuit board material with electronic components. In other words: the fluidic level is not necessarily determined by the microchannel position alone but, in addition, also by corresponding structures in the photoresist layer.